# Sapido
One for all

# Wired Router
Value Cloud Wired Router

BRC70x

Networking

User Manual v1.0.0

## CE Statement of Conformity

Our product has been tested in typical configuration by Ecom Sertech Corp and was found to comply with the essential requirement of "Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility" (89/336/EEC; 92/31/EEC; 93/68/EEC)

# Chapter 1    Introduction

1.1    **Hardware Features**

❑ **Main Chipset**
- ✧ Realtek RTL8196E Network Processor

❑ **Flash & RAM**
- ✧ Flash：4Mbytes Serial Flash
- ✧ RAM：32Mbytes SDRAM

❑ **Ethernet Interface**
- ✧ WAN: 1 x 10/100 Mbps RJ45 with auto MDI/MDIX
- ✧ LAN: 4 x 10/100 Mbps RJ45 with auto MDI/MDIX

❑ **Buttons**
- ✧ Reboot/Reset：Press 1 second is for reboot; press 10 seconds is for reset to default configuration

❑ **Power Supply**
- ✧ Power Adapter DC5V / 0.5A
- ✧ DC Jack Connect
- ✧ BSMI

❑ **LED Indicators**
- ✧ Power LED x1
- ✧ Status LED x1 (Reset Indicator)
- ✧ WAN LED x 1
- ✧ LAN LED x 4

❑ **Security Certification**
- ✧ FCC
- ✧ CE
- ✧ BSMI

## 1.2 **Product Appearance**



**LED Indicator Status Description:**

| LED | Function | Color | Status | Description |
|---|---|---|---|---|
| **Power** | System status | Green | On | System is ready to work |
| **Status** | Reset indicator | Green | On | System is ready to work |
| | | | Blinking (120ms) | Reset or firmware upgrade in progress |
| **WAN x 1** | WAN port activity | Green | On | 100Mbps Ethernet is connected |
| | | | Blinking (30ms) | 100Mbps Ethernet Tx/Rx activity |
| | | Green | On | 10Mbps Ethernet is connected |
| | | | Blinking (120ms) | 10Mbps Ethernet Tx/Rx activity |

| LAN x 4 | LAN port activity | Green | On | 100Mbps Ethernet is connected |
|---|---|---|---|---|
| | | | Blinking (30ms) | 100Mbps Ethernet Tx/Rx activity |
| | | Green | On | 10Mbps Ethernet is connected |
| | | | Blinking (120ms) | 10Mbps Ethernet Tx/Rx activity |

# Chapter 2 System and Network Setup

The BRC70X is an easy to setup device for various application and environment, especially for large installs such as hotels, offices space, warehouses, hot-spots and more.

To begin with BRC70X, you must have the following minimum system requirements. If your system can't correspond to the following requirements, you might get some unknown troubles on your system.

Internet Account for XDSL/Cable Modem

One Ethernet (10/100mbps) network interface card.

TCP/IP and at least one web browser software installed (E.g.: Internet Explorer, Firefox, Safari、Chrome latest version).

Recommended OS: WinXP, Visata or Win7 / Linux.

## 2.1 Build Network Connection

Administrator can manage the settings for WAN, LAN, NTP, password, User Accounts, Firewall, etc.

Please confirm the network environment or the purpose before setting this product.

## 2.2 Connecting BRC70X

Prepare the followings before the connection:

PC or Notebook for setup

Ethernet cable

1. Make sure you are under "Router Mode".

2. Connect BRC70X to xDSL/ Cable modem with the Ethernet cable, WAN to LAN.

3. Turn on your Computer.

## 2.3 Network setup

After the network connection is built, the next step is setup the router with proper network parameters, so it can work properly in your network environment. Before you connect to the router and start configuration procedures, your computer must be able to get an IP address from the router automatically (use dynamic IP address). If it's set to use static IP address, or you're unsure, please follow the below instructions to configure your computer with dynamic IP address:

If the operating system of your computer is….

Windows 2000           - please go to section 2.3.1
Windows XP             - please go to section 2.3.2
Windows Vista/Win7    - please go to section 2.3.3

### 2.3.1 Windows 2000

Click "Start" button (it should be located at lower-left corner of your computer), then click control panel. Double-click Network and Dial-up Connections icon, double click Local Area Connection, and Local Area Connection Properties window will appear. Select "Internet Protocol (TCP/IP)", then click "Properties".
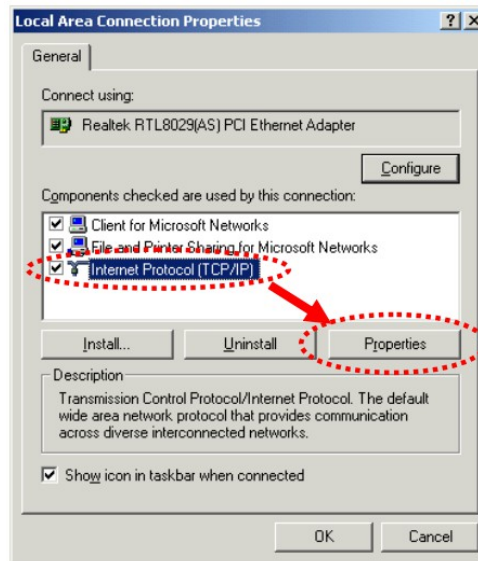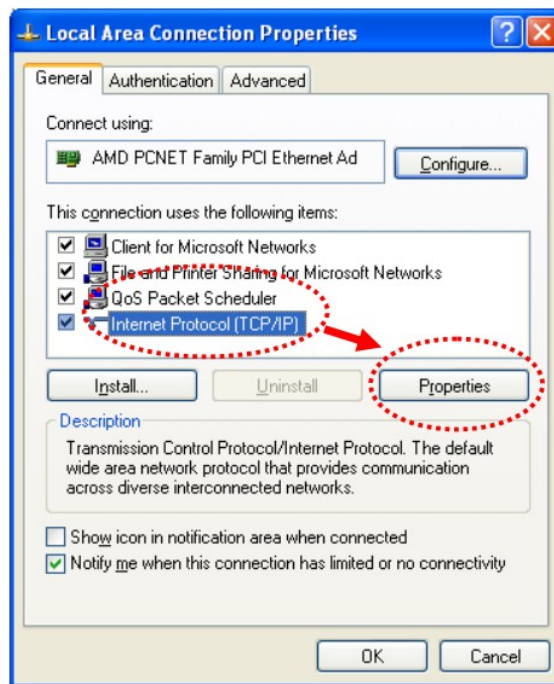
1.   Select "Obtain an IP address automatically" and "Obtain DNS server address automatically", then click "OK".
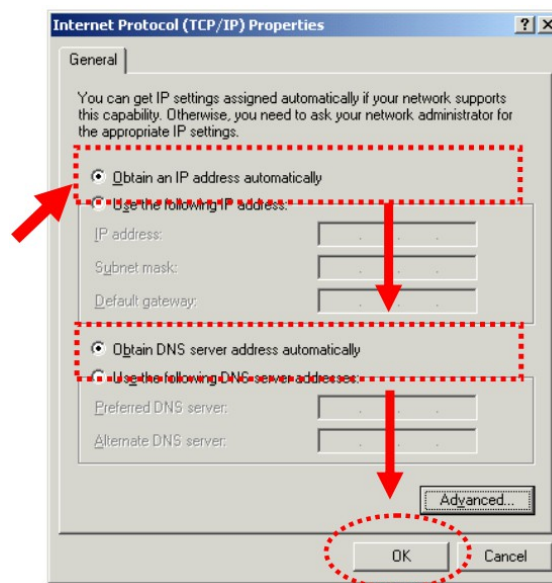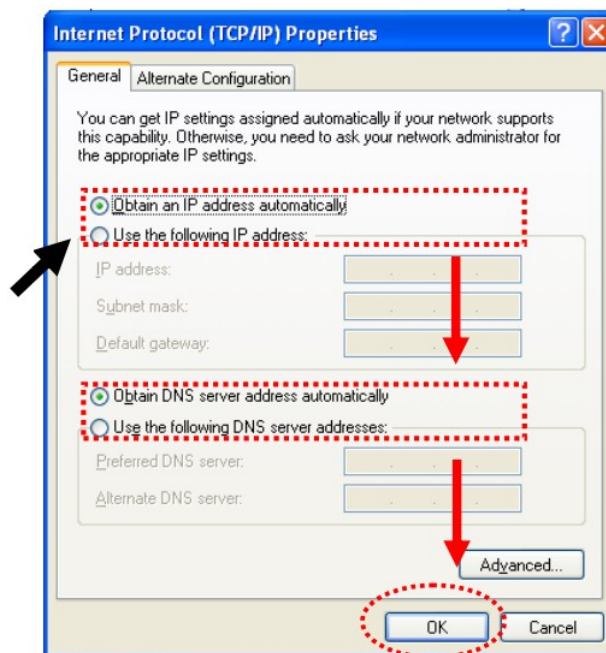


### 2.3.2   Windows XP

1.   Click "Start" button (it should be located at lower-left corner of your computer), then click control panel. Double-click Network and Internet Connections icon, click Network Connections, then double-click Local Area Connection, Local Area Connection Status window will appear, and then click "Properties".
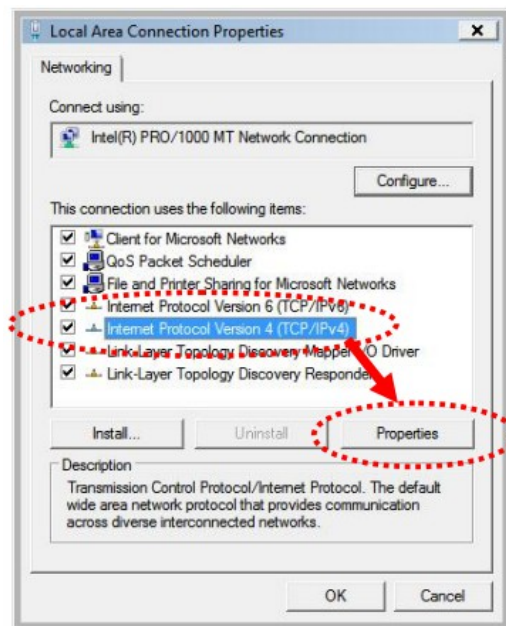
2.    Select "Obtain an IP address automatically" and "Obtain DNS server address automatically", then click "OK".



### 2.3.3    Windows Vista / Windows 7

1.    Click "Start" button (it should be located at lower-left corner of your computer), then

click control panel. Click View Network Status and Tasks, and then click Manage Network Connections. Right-click Local Area Network, then select "Properties". Local Area Connection Properties window will appear, select "Internet Protocol Version 4 (TCP / IPv4)", and then click "Properties".
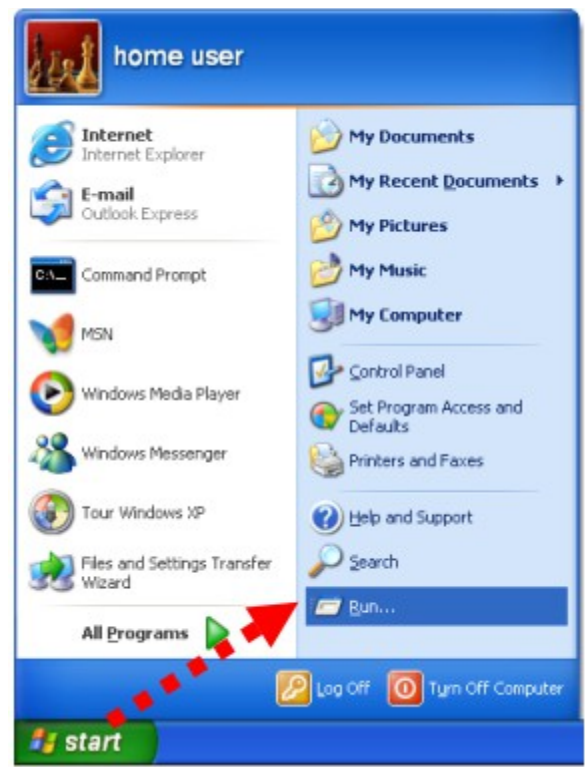


2. Select "Obtain an IP address automatically" and "Obtain DNS server address automatically", then click "OK".
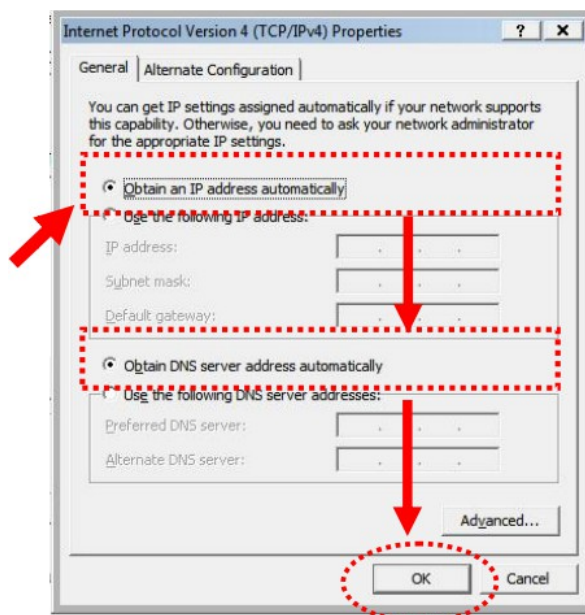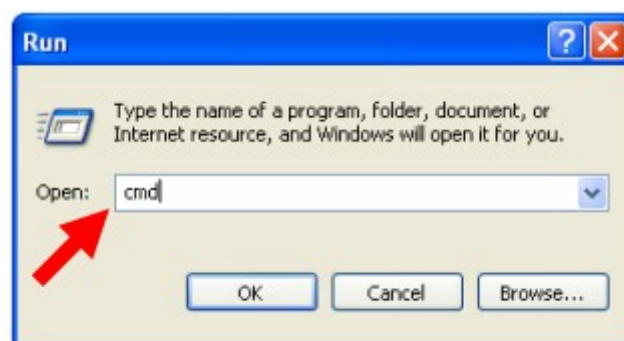
## 2.4　**Router IP Address Lookup**

After the IP address setup was completed, please clicks "start" → "run" at the bottom-lower corner of your desktop:



Input "cmd", and then click "OK".



Input "ipconfig", then press "Enter" key.  Please check the IP address followed by "Default Gateway" (In this example, the gateway IP address of router is 192.168.1.1)

<div style="border: 1px solid red; color: red;">
NOTE: If the IP address of Gateway is not displayed, or the address followed by 'IP Address' begins with "169.x.x.x", please recheck network connection between your computer and router, and / or go to the beginning of this chapter, to recheck every step of network setup procedure.
</div>

### 2.4.1   Log into Web GUI

After your computer obtained an IP address from router, please start your web browser, and input the IP address of the router in address bar, and the following message should be shown. Please click "admin" to login the BRC70X.



Enter the User name and Password in to the blank and then Click **Login**.  The default values for User Name and Password are **admin** (all in lowercase letters).



Users can set or change user name and password used for accessing the web management interface in this section.

Input User Name and New Password, then input Confirm Password again.



# Chapter 3    Internet Connection

This Chapter describes how to setup BRC70X to the internet. The BRC70X is delivered with the following factory default parameters.

*Default IP address: 192.168.1.1*

*Default IP subnet mask: 255.255.255.0*

*Web login user name: admin*

*Web login password: admin*

## 3.1    Using as a broadband router

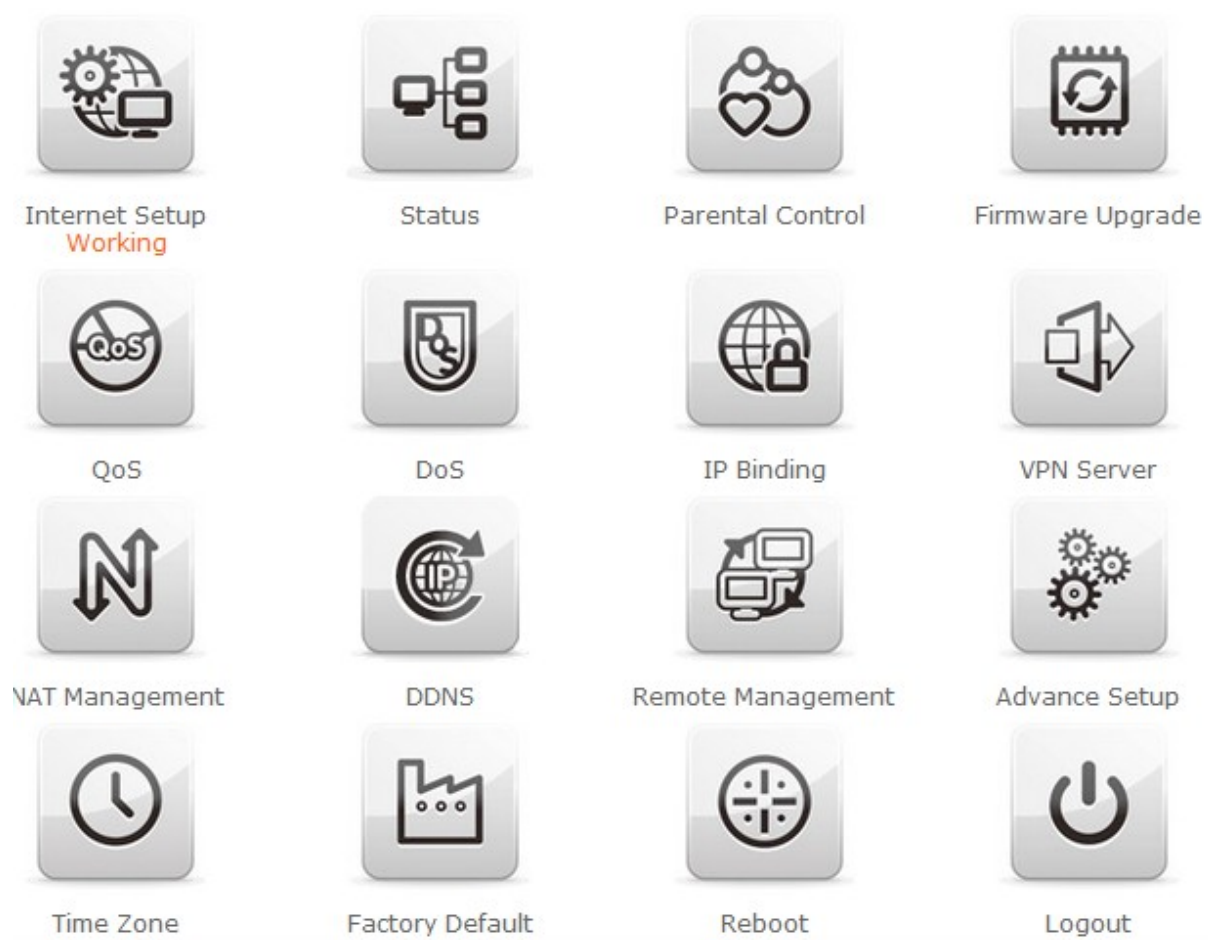**1.**    Open a Web browser, and enter http://192.168.1.1 (Default Gateway) into the blank.

**2.** Enter the User name and Password into the blank and then click **Login**. The default values for User Name and Password are **admin** (all in lowercase letters).



Download pdadd

Status page

Logout
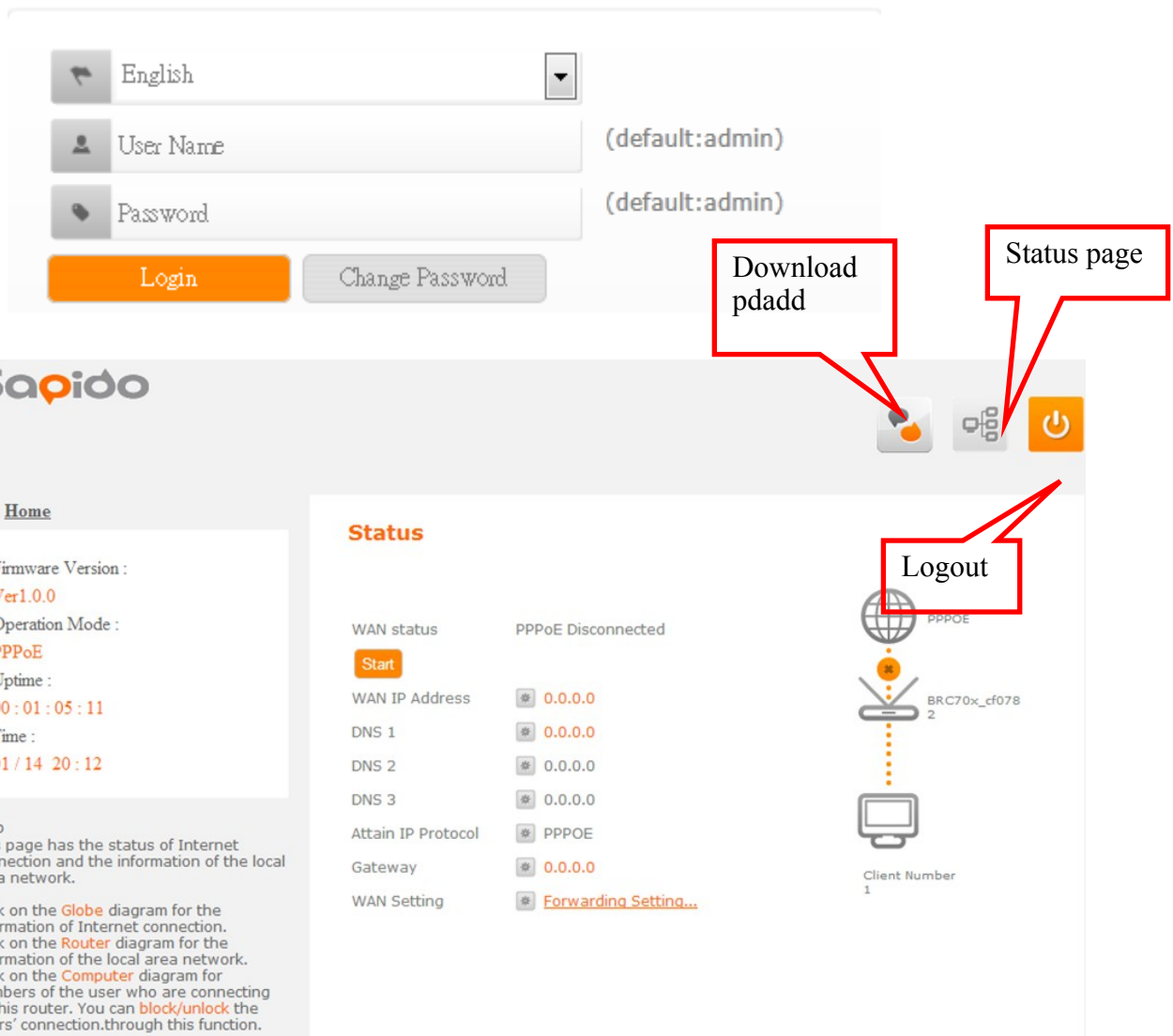


### 3.2 **Home button menu**

⌂ Home **Click Home button icon to enter MENU as below.**

| Internet Setup | Status | Parental Control | Firmware Upgrade |
|---|---|---|---|
| Working | | | |
| QoS | DoS | IP Binding | VPN Server |
| NAT Management | DDNS | Remote Management | Advance Setup |
| Time Zone | Factory Default | Reboot | Logout |

| Item | Description |
|---|---|
| **Internet Setup** | There are several different method to access Internet，ADSL 、DHCP、static IP、PPTP、L2TP |
| **Status** | You could check WAN, LAN, Client network in status. |
| **Parental control** | You can use URL filter and MAC address filter schedule to limit access Internet. |
| **Firmware Upgrade** | This function allows you upgrade the BRC70X firmware to new version. Please note do not power off the device during the upload because it may crash the system. |
| **QoS** | The QoS can let you classify Internet application traffic by source/destination IP address and port number. |
| **DoS** | Denial of Service |
| **IP Blinding** | Static DHCP Setup |
| **VPN Server** | **PPTP/L2TP** general setup introduction. |
| **NAT Management** | There are port forwarding and DMZ function |

| | |
|---|---|
| **DDNS** | You can assign a fixed host and domain name to a dynamic Internet IP address. Each time the router boots up, it will re-register its domain-name-to-IP-address mapping with the DDNS service provider. |
| **Remote management** | This page allow you to access the GUI on WAN. |
| **Advance Setup** | Advance setting menu |
| **Time Zone** | You can maintain the system time by synchronizing with a public time server over the Internet. |
| **Factory Default** | You could reset the current configuration to factory default. |
| **Reboot** | This function is used to reboot |
| **logout** | This page is used to logout. |

## 3.3 Internet Setup

Click **Internet Setup** icon to enter WAN setup as below**.** The Internet Setup is depended on the service that you contract with the provider. The BRC70X provides five selections for the Internet Mode type, **PPPoE, DHCP, Static IP , PPTP and L2TP**. Check with your ISP if you don't know the WAN type.
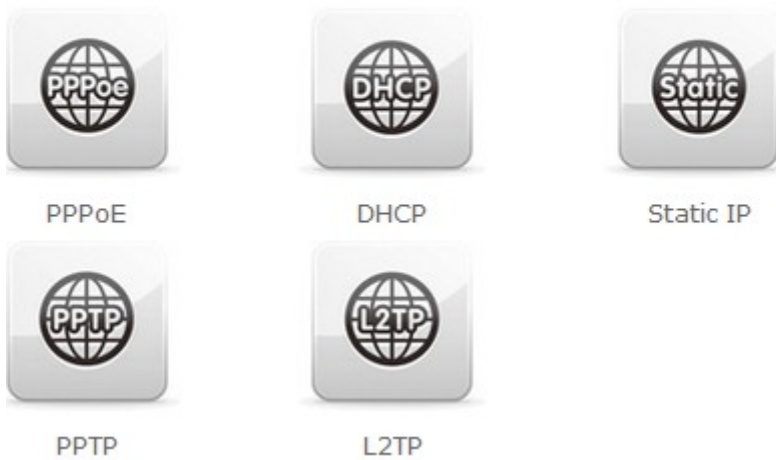
### 3.3.1　PPPoE

**PPPoE**

**PPPoE user name and password**

User Name:　74709739@hinet.net

Password:　••••••••

Apply

| Item | Description |
|------|-------------|
| **User Name** | Input your user name provided by your ISP. If you don't know, please check with your ISP. |
| **Password** | Input the password provided by your ISP. |

### 3.3.2　DHCP

**DHCP**

**MAC setting**

MAC type　　　　○ Universal　● Specific
Clone MAC Address:　　00d041cf0782

Apply

| Item | Description |
|------|-------------|
| **MAC type** | Select **"Universal" or "Specific"** |

### 3.3.3 Static IP

**Static IP**

**IP Address setting**

| | |
|---|---|
| IP Address: | 172.1.1.1 |
| Subnet Mask: | 255.255.255.0 |
| Gateway: | 172.1.1.254 |
| DNS: | 0.0.0.0 |

Apply

| Item | Description |
|---|---|
| **IP Address** | Enter the IP address which is provided by your ISP. |
| **Subnet Mask** | Please enter the Subnet Mask address |
| **Gateway** | Input ISP Default Gateway Address. |
| **DNS** | Input DNS information which is provided by your ISP |

### 3.3.4 PPTP

## PPTP

**IP Address setting**

| | |
|---|---|
| Address Mode: | ● Dynamic  ○ Static |
| Server IP Address: | 172.1.1.1 |
| User Name: | |
| Password: | |
| MTU Size: | 1400  (1400-1460 Bytes) |
| | ☐ Enable MPPE Encryption |
| | ☐ Enable MPPC Compression |

**Apply**

| Item | Description |
|---|---|
| **Address Mode** | Select **"Dynamic"** or **"Static"** |
| **IP Address** | Input your IP address or domain name |
| **Gateway** | Input ISP Default Gateway Address. |
| **Server IP Address** | Input your server IP address provided by your ISP.  If you don't know, please check with your ISP. |
| **User Name** | Input PPTP account provided by your ISP. |
| **Password** | Input the password provided by your ISP. |
| **Request MPPE Encryption** | Microsoft Point-to-Point Encryption (MPPE) provides data security for the PPTP connection that is between the VPN client and VPN server. |
| **Enable IGMP Proxy** | Enable IGMP Proxy to provide the service for IP hosts and adjacent multicast routers to establish multicast group memberships. |

### 3.3.5   L2TP

## L2TP

### IP Address setting

| | |
|---|---|
| Address Mode: | ⦿ Dynamic ○ Static |
| Server IP Address: | 172.1.1.1 |
| User Name: | |
| Password: | |
| MTU Size: | 1400  (1400-1460 Bytes) |

**Apply**

| Item | Description |
|---|---|
| **Address Mode** | Select **"Dynamic"** or **"Static"** |
| **IP Address** | Input your IP address or domain name |
| **Gateway** | Input ISP Default Gateway Address. |
| **Server IP Address** | Input your server IP address provided by your ISP.  If you don't know, please check with your ISP. |
| **User Name** | Input PPTP account provided by your ISP. |
| **Password** | Input the password provided by your ISP. |
| **MTU Size** | Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually. |

# Chapter 4    GUI Function Setup

## 4.1    Status

You could check WAN, LAN, Client network information

■    **WAN information**

**Status**



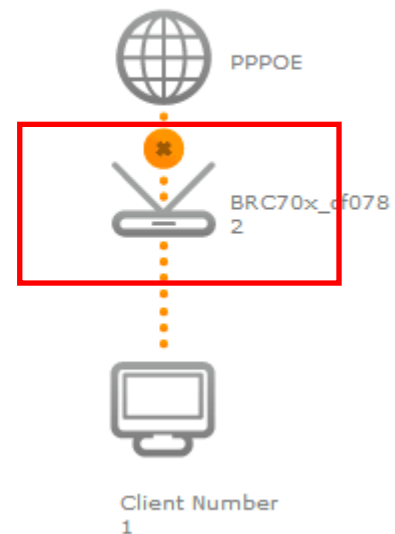| | |
|---|---|
| WAN status | PPPoE Disconnected |
| Start | |
| WAN IP Address | ✷ 0.0.0.0 |
| DNS 1 | ✷ 0.0.0.0 |
| DNS 2 | ✷ 0.0.0.0 |
| DNS 3 | ✷ 0.0.0.0 |
| Attain IP Protocol | ✷ PPPOE |
| Gateway | ✷ 0.0.0.0 |
| WAN Setting | ✷ Forwarding Setting... |

PPPOE

BRC70x_cf078 2

Client Number 1
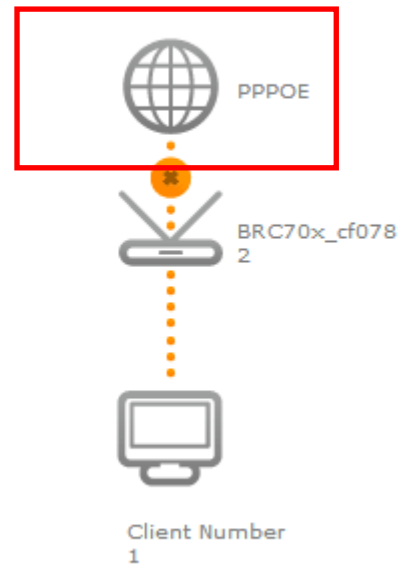
■    **LAN information**

## Status

LAN IP Address ⚙ 192.168.1.1

MAC Address ⚙ 00:d0:41:cf:07:81

PdNet ⚙ ☑

Device Name ⚙ BRC70x_cf0782

Web Server on WAN ⚙ ☑

**Apply**

PPPOE

BRC70x_cf0782

Client Number 1

■ **Client information**

Manage client can access internet or not

## Status

### Client List

| IP address | Host name | Blockade |
|---|---|---|
| 192.168.1.100 | James-PC | 🔒 |

### Blockade List

| IP address | Host name | Unlock |
|---|---|---|

PPPOE

BRC70x_cf0782

Client Number 1
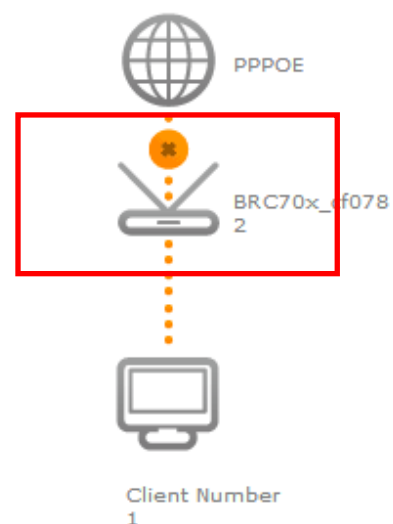
## 4.2 Parental Control

Parental Control provide URL Filtering and MAC Filter Schedule for setup

## Parental Control

**URL Filtering**     **MAC Filter Schedule**

### 4.2.1 URL Filtering

URL Filtering is used to restrict users to access specific websites in internet

## URL Filtering     BACK

☐ **Enable URL Filtering**

URL Address: [＿＿＿＿＿＿＿]   Add

**Current Filter Table:**

| URL Address | Select |
|---|---|

Delete Selected   Delete All   Apply

| Item | Description |
|---|---|
| **Enable URL Filtering** | Please select Enable MAC Filtering to filter MAC addresses |
| **URL Address** | Please enter the MAC address that needs to be filtered. |
| **Apply** | Click on Apply to save the setting data. |
| **Current Filter Table** | It will display all ports that are filtering now. |
| **Delete Selected & Delete All** | Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table. |

Notes: This function will not be in effect when the Virtual Server is enabled. Please disable Virtual Server before activate the URL Filtering function.

### 4.2.2 MAC Filter Schedule

When enabled, filtering will be based on the MAC address of LAN computers. Any computer with its MAC address on this list will be blocked from accessing the Internet.

## MAC Filter Schedule



| Item | Description |
|------|-------------|
| **Enable MAC Filtering** | Please select Enable MAC Filtering to filter MAC addresses. |

## 4.3 **Firmware Upgrade**

This function can upgrade the firmware of the router. There are two method for user upgrade firmware: Auto upgrade and Manual upgrade.

Note: The firmware upgrade will not remove your previous settings.

### 4.3.1 **Auto upgrade**

**It provide auto detect new firmware from Internet, and user can select to upgrade new version or not.**

## Firmware Upgrade

◉ Auto upgrade        ○ Manual upgrade

Now Version : Ver1.0.1
New Version :
Upgrade Firmware ?

[Yes]

### 4.3.2    Manual upgrade

**If you download firmware from website, you can upgrade firmware manual as below.**

## Firmware Upgrade

○ Auto upgrade        ◉ Manual upgrade

Select File: [                ] [瀏覽…]

[Upload]    [Reset]

## 4.4    QoS

The QoS can let you classify Internet application traffic by source/destination IP address and port number.

To assign priority for each type of application and reserve bandwidth can let you have a better experience in using critical real time services like Internet phone, video conference …

etc.



| Item | Description |
|---|---|
| **Enable QoS** | Check "Enable QoS" to enable QoS function for the WAN port. You also can uncheck "Enable QoS" to disable QoS function for the WAN port. |
| **Manual Uplink Speed** | Set the uplink speed by manual to assign the download or upload bandwidth by the unit of Kbps. |
| **Manual Downlink Speed** | Set the downlink speed by manual to assign the download or upload bandwidth by the unit of Kbps. |
| **Mode** | Select Guaranteed minimum bandwidth or Restricted maximum bandwidth |
| **MAC Address** | Set MAC Address if the address type is by MAC Address |
| **Uplink Bandwidth Percentage** | LAN device bandwidth of uplink bandwidth |
| **Download Bandwidth Percentage** | LAN device bandwidth of download bandwidth |
| **Add** | Add the setting data |
| **Delete Selected & Delete All** | Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table. |

## 4.5 DoS

**Home:**



| Item | Description |
|------|-------------|
| **Home** | Check "Home" to enable DoS function for prevention. You also can check "No Prevention" to disable DoS function. |

**Enterprise:**

## Denial of Service

○ **Disable**　　　○ **Home**　　　◉ **Enterprise**

☑ Whole System Flood : SYN 　[ 0 ]　Packets/Second
☑ Whole System Flood : FIN 　[ 0 ]　Packets/Second
☑ Whole System Flood : UDP 　[ 0 ]　Packets/Second
☑ Whole System Flood : ICMP 　[ 0 ]　Packets/Second
☑ Per-Source IP Flood : SYN 　[ 0 ]　Packets/Second
☑ Per-Source IP Flood : FIN 　[ 0 ]　Packets/Second
☑ Per-Source IP Flood : UDP 　[ 0 ]　Packets/Second
☑ Per-Source IP Flood : ICMP 　[ 0 ]　Packets/Second
☑ Enable Source IP Blocking 　[ 0 ]　Block time (sec)
☑ TCP/UDP Port Scan 　[ Low ▾ ]　Sensitivity
☑ ICMP Smurf
☑ IP Land
☑ IP Spoof
☑ IP Tear Drop
☑ Ping Of Death
☑ TCP Scan
☑ TCP Syn With Data
☑ UDP Bomb
☑ UDP Echo Chargen

[ Refresh ]　[ Save ]　[ Apply ]

| Item | Description |
|------|-------------|
| **Enterprise** | Check "Enterprise" to enable DoS function for prevention. You also can check "No Prevention" to disable DoS function. |

## 4.6　IP Binding

This function allows you reserve IP addresses, and assign the same IP address to the network device with the specified MAC address any time it requests an IP address. This is

almost the same as when a device has a static IP address except that the device must still request an IP address from the DHCP server.



| Item | Description |
|------|-------------|
| **Enable Static DHCP** | Select enable to use Static DHCP function |
| **IP Address** | Please enter IP address to limit |
| **MAC address** | Please enter MAC address to limit |
| **Static DHCP List** | **It will display all IP and MAC address you made.** |
| **Delete Selected & Delete All** | Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table. |

## 4.7   VPN Server

The VPN Server function providing PPTP/L2TP mode are designed to allow users to an external network device / computer and office local area network to establish a secure network connection. And User can safe login office local area network and access to personal documents, files Sharing and other resources. It provides the most convenient VPN encryption.

## VPN Server

**Enable setting:**

| | | |
|---|---|---|
| Connection type: | ◉ PPTP | ○ L2TP |
| VPN Server IP: | 192.168.100.1 | |
| Remote IP range: | 192.168.100.100 | 192.168.100.200 |
| Authentication Protocol: | ◉ PAP ○ CHAP ○ MSCHAP v2 | |
| User Name: | | |
| Password: | | Add |

**Current Filter Table:**

| User Name | Connection Type | select |
|---|---|---|

Delete Selected    Delete All    Apply

| Item | Description |
|---|---|
| **Enable Setting** | Check this option, will start the VPN Server feature. |
| **Connection Type** | Provide PPTP or L2TP access connection type. |
| **VPN Server IP** | Input the IP address of VPN server |
| **Remote IP range** | It is the IP range of assigned to the VPN Client |
| **Authentication Protocol** | It is provided three types of authentication protocol |
| **MPPE Encryption Mode (RC4)** | It is provided three encryption modes |
| **User Name** | Input the login name of the client user |
| **Password** | Input the login password of the client user |
| **Current Filter Table** | It will display all ports that are filtering now. |
| **Delete Selected & Delete All** | Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table. |

## 4.8    NAT Management

This section contains configurations for the BRC70X 's advanced functions such as: virtual server, and DMZ to provide your network under a security environment.

**NAT Management**



Virtual Server          DMZ

### 4.8.1 Virtual Server

The Virtual Server feature allows users to create Virtual Servers by re-directing a particular range of service port numbers (from the WAN port) to a particular LAN IP address.



| Item | Description |
|------|-------------|
| **Enable Virtual Server** | Select to enable virtual server or not. |
| **Address** | Specify the IP address which receives the incoming packets. |
| **Protocol** | Select the protocol type. |

| Public Port Range | Enter the port number, for example 80-80. |
|---|---|
| Private Port Range | Enter the port number, for example 20-22. |
| Current Port Forwarding Table | **It will display all port forwarding regulation you made.** |
| Delete Selected & Delete All | Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table. |

Please find the following figure to know that what the virtual server is. The web server is located on 192.168.1.100, forwarding port is 80, and type is TCP+UDP.



### 4.8.2　DMZ

The DMZ feature allows one local user to be exposed to the Internet for special-purpose applications like Internet gaming or videoconferencing. When enabled, this feature opens all ports to a single station and hence renders that system exposed to intrusion from outside. The port forwarding feature is more secure because it only opens the ports required by that application.

## DMZ

Enable DMZ

DMZ Host IP Address : [_____]

[Refresh] [Save] [Apply]

| Item | Description |
|------|-------------|
| **Enable DMZ** | It will enable the DMZ service if you select it. |
| **DMZ Host IP Address** | Please enter the specific IP address for DMZ host. |

## 4.9 **DDNS**

You can assign a fixed host and domain name to a dynamic Internet IP address. Each time the router boots up, it will re-register its domain-name-to-IP-address mapping with the DDNS service provider. This is the way Internet users can access the router through a domain name instead of its IP address.

Note: make sure that you have registered with a DDNS service provider before enabling this feature.

## Dynamic DNS

**Enable DDNS** ☐

Service Provider : [0] [<<] [dyndns ▾]

Domain Name : [host.dyndns.org]

User Name/Email : [                    ]

Password/Key : [                    ]

Note:
For TZO, you can have a 30 days free trial here or manage your TZO account in control panel
For DynDNS, you can create your DynDNS account

[Refresh] [Save] [Apply]

Please enter Domain Name, User Name/Email, and Password/Key. After entering, click on Apply Changes to save the setting, or you may click on Reset to clear all the input data.

| Item | Description |
|------|-------------|
| **Enable/Disable DDNS** | Select enable to use DDNS function. Each time your IP address to WAN is changed, and the information will be updated to DDNS service provider automatically. |
| **Service Provider** | Choose correct Service Provider from drop-down list, here including DynDNS, TZO, ChangeIP, Eurodns, OVH, NO-IP, ODS, Regfish embedded in BRC70X. |
| **User Name/Email** | User name is used as an identity to login Dynamic-DNS service. |
| **Password/Key** | Password is applied to login Dynamic-DNS service. |

## 4.10 Remote Management

This page allow you to access the GUI on WAN.

## Remote manager

HTTP Connection Port: 80

Enable Web Server Access on WAN: Enable

Refresh   Save   Apply

| Item | Description |
|---|---|
| **HTTP Connection Port** | Users can access GUI by this port，default is 80 |
| **Enable Web Server Access on WAN** | Allow user access GUI from WAN side |

## 4.11 Time Zone

Users can select time zone and synchronize the local clock on the router.

## Time Zone Setting

Time Zone Select :
(GMT+08:00)Taipei

Refresh   Save   Apply

| Item | Description |
|---|---|
| **Time Zone Select** | Please select the time zone. |

## 4.12 Factory Default

You could reset the current configuration to factory default.

**Reset Default**

Are you really want to factory default machine config ?

Yes

## 4.13 Reboot

This function is used to reboot

**Reboot**

Do you want to reboot ?

Yes

## 4.14 Logout

This page is used to logout

**Logout**

Do you want to logout ?

Yes

# Chapter 5 Advance Setup

## 5.1 Internet Mode: Internet Setup

**Please refer Internet Setup**

## 5.2 IP Config

### 5.2.1.1 PPPoE

User Name:

Password:

Service Name:

Connection Type: Continuous

Connect  Disconnect

Idle Time: 5 (1-1000 minutes)

MTU Size: 1452 (1360-1492 Bytes)

Backup select: None Backup

◉ Attain DNS Automatically

◎ Set DNS Manually

DNS 1: 8.8.8.8

DNS 2: 0.0.0.0

DNS 3: 0.0.0.0

Clone MAC Address: 000000000000

☑ Enable IGMP Proxy

☐ Enable Ping Access on WAN

Refresh  Save  Apply

| Item | Description |
|---|---|
| **User Name** | Input your user name provided by your ISP. If you don't know, please check with your ISP. |
| **Password** | Input the password provided by your ISP. |
| **Service Name** | Input the service name provided by your ISP. |

| | |
|---|---|
| **Connection Type** | Three types for select: **Continues, Connect on Demand,** and **Manual.** |
| **MTU Size** | Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually. |
| **DNS** | Select **Attain DNS Automatically**. Or select **Set DNS Manually**, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3. |
| **Clone Mac Address** | Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address" |
| **Save & Apply** | Click on Save to save the setting date, the Apply button for execute current configuration. |

### 5.2.1.2 DHCP



| Item | Description |
|---|---|
| **Host Name** | You can keep the default as the host name, or input a specific name if required by your ISP. |
| **MTU Size** | Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually. |
| **DNS** | Select **Attain DNS Automatically**. Or select **Set DNS Manually**, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3. |

| Clone Mac Address | Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address" |
|---|---|
| Save & Apply | Click on Save to save the setting date, the Apply button for execute current configuration. |

### 5.2.1.3 Static IP



| Item | Description |
|---|---|
| **IP Address** | Enter the IP address which is provided by your ISP. |
| **Subnet Mask** | Please enter the Subnet Mask address |
| **Gateway** | Input ISP Default Gateway Address, . |
| **MTU Size** | Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually. |
| **DNS** | Input DNS information which is provided by your ISP |
| **Clone Mac Address** | Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address" |
| **Save & Apply** | Click on Save to save the setting date, the Apply button for execute current configuration. |

### 5.2.1.4 PPTP

| | |
|---|---|
| Address Mode: | ◉ Dynamic ○ Static |
| Server IP Address: | 172.1.1.1 |
| User Name: | |
| Password: | |
| MTU Size: | 1400 (1400-1460 Bytes) |
| | ☐ Enable MPPE Encryption |
| | ☐ Enable MPPC Compression |
| | ◉ Attain DNS Automatically |
| | ○ Set DNS Manually |
| DNS 1: | 8.8.8.8 |
| DNS 2: | 0.0.0.0 |
| DNS 3: | 0.0.0.0 |
| Clone MAC Address: | 000000000000 |
| | ☑ Enable IGMP Proxy |
| | ☐ Enable Ping Access on WAN |

Refresh  Save  Apply

| Item | Description |
|---|---|
| **Server IP Address** | Input your server IP address provided by your ISP. If you don't know, please check with your ISP. |
| **User Name** | Input PPTP account provided by your ISP. |
| **Password** | Input the password provided by your ISP. |
| **MTU Size** | Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually. |
| **Enable MPPE Encryption** | Microsoft Point-to-Point Encryption (MPPE) provides data security for the PPTP connection that is between the VPN client and VPN server. |
| **Enable MPPC Compression** | Microsoft Point-to-Point Compression (MPPC) is a scheme used to compress Point-to-Point Protocol (PPP) packets between Cisco and Microsoft client devices. The MPPC algorithm is designed to optimize bandwidth utilization in order to support multiple simultaneous connections. The MPPC algorithm uses a Lempel-Ziv (LZ) based algorithm with a continuous history buffer, called a |

| | dictionar |
|---|---|
| **DNS** | Select **Attain DNS Automatically**. Or select **Set DNS Manually**, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3. |
| **Clone Mac Address** | Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address" |
| **Save & Apply** | Click on Save to save the setting date, the Apply button for execute current configuration. |

### 5.2.1.5　L2TP

| Address Mode: | ◉ Dynamic　◯ Static |
|---|---|
| Server IP Address: | 172.1.1.1 |
| User Name: | |
| Password: | |
| MTU Size: | 1400　(1400-1460 Bytes) |

◉ Attain DNS Automatically
◯ Set DNS Manually

| DNS 1: | 8.8.8.8 |
|---|---|
| DNS 2: | 0.0.0.0 |
| DNS 3: | 0.0.0.0 |
| Clone MAC Address: | 000000000000 |

☑ Enable IGMP Proxy
☐ Enable Ping Access on WAN

Refresh　Save　Apply

| Item | Description |
|---|---|
| **Server IP Address** | Input your server IP address or Host Name provided by your ISP. If you don't know, please check with your ISP. |
| **User Name** | Input PPTP account provided by your ISP. |
| **Password** | Input the password provided by your ISP. |
| **MTU Size** | Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually. |

| | |
|---|---|
| **DNS** | Select **Attain DNS Automatically**. Or select **Set DNS Manually**, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3. |
| **Clone Mac Address** | Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address" |
| **Save & Apply** | Click on Save to save the setting date, the Apply button for execute current configuration. |

### 5.2.2 LAN

Use this page to set up the local IP address and subnet mask for your router. Please select **LAN Interface Setup** under the **IP Config** menu and follow the instructions below to enter the LAN setting page to configure the settings you want.

## LAN Interface Setup

| | |
|---|---|
| IP Address: | 192.168.0.1 |
| Subnet Mask: | 255.255.255.0 |
| Gateway: | 192.168.0.1 |
| DHCP: | Server |
| DHCP Client Range: | 192.168.0.100 - 192.168.0.200    Show Client |
| DHCP Lease Time: | 480 (1 - 10080 minutes) |
| Static DHCP: | Set Static DHCP |
| Domain Name: | Sapido_Router |
| 802.1d Spanning Tree: | Disabled |
| Clone MAC Address: | 000000000000 |

Refresh    Save    Apply

| Item | Description |
|---|---|
| **IP Address** | The default value of LAN IP address is **192.168.1.1** for this router. |
| **Subnet Mask** | Input Subnet Mask, normally it is 255.255.255.0. |

| Default Gateway | Input ISP Default Gateway Address. If you don't know, please check with your ISP. |
|---|---|
| DHCP | Enable or disable DHCP services. The DHCP server will automatically allocate an unused IP address from the IP address pool to the requesting computer if enabled. |
| DHCP Client Range | Define the DHCP client range and then the DHCP server will assign an IP to the requesting computer from this range. The **Show Client** will display every assigned IP address, MAC address, and expired time. The default range is 192.168.1.100 - 192.168.1.200. |
| Device Name | The default is 11N_Broadband_Router。 |
| 802.1d Spanning Tree | **IEEE 802.1d Spanning Tree Protocol (STP)** is a link layer network protocol that ensures a loop-free topology for any bridged LAN. The main purpose of STP is to ensure that you do not create loops when you have redundant paths in your network. Loops are deadly to a network. |
| Clone MAC Address | Copy the MAC address from the device you had registered to your ISP if your ISP asks for the specific MAC Address. |

### 5.2.3 DDNS

You can assign a fixed host and domain name to a dynamic Internet IP address. Each time the router boots up, it will re-register its domain-name-to-IP-address mapping with the DDNS service provider. This is the way Internet users can access the router through a domain name instead of its IP address.

Note: make sure that you have registered with a DDNS service provider before enabling this feature.

Please enter Domain Name, User Name/Email, and Password/Key. After entering, click on Apply Changes to save the setting, or you may click on Reset to clear all the input data.

| Item | Description |
|---|---|
| **Enable/Disable DDNS** | Select enable to use DDNS function. Each time your IP address to WAN is changed, and the information will be updated to DDNS service provider automatically. |
| **Service Provider** | Choose correct Service Provider from drop-down list, here including DynDNS, TZO, ChangeIP, Eurodns, OVH, NO-IP, ODS, Regfish embedded in BRC70X . |
| **User Name/Email** | User name is used as an identity to login Dynamic-DNS service. |
| **Password/Key** | Password is applied to login Dynamic-DNS service. |
| **Save & Apply** | Click on "Save" to save the setting data. The "Apply" button can execute current configuration |

## 5.3   IPv6 Config

## IPv6 Setting

☑ **Enable IPv6**

**WAN**

Origin Type: `DHCPv6 ▾`

WAN Link Type: `PPPoE ▾`

**PPPoE**

User Name: `_____`

Password: `_____`

Service Name: `_____`

AC Name: `_____`

Connection Type: `Continuous ▾`

[ Connect ] [ Disconnect ]

Idle Time: `5` (1-1000 minutes)

MTU Size: `1452` (1360-1492 bytes)

**DNSv6 Setting**

Enable DNSv6 ☑

Router Name `router.my`

⦿ Attain DNS Automatically

◯ Set DNS Manually

| DNS1 | Prefix Length |
|---|---|
| `0000` : `0000` : `0000` : `0000` : `0000` : `0000` : `0000` : `0000` | `0` |

[ Refresh ] [ Save ] [ Finish ]

| Item | Description |
|---|---|
| **Origin Type** | SLAAC、DHCPv6、IP。Please check ISP to get correct type |
| **WAN Link Type** | PPPoE、IP |
| **PPPoE** | Use IPv4 PPPoE account and password to do IPv6 connect |
| **Child Prefix Address** | Check ISP to get this data |
| **Static IP** | Check ISP to get IP address and default gateway IP address |
| **Router Name** | Router domain |
| **DNSv6** | Select Attain DNS Automatically. Or select Set DNS Manually, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS |

## 5.4 **NAT**

This section contains configurations for the BRC70X 's advanced functions such as: virtual server, and DMZ to provide your network under a security environment.

### 5.4.1 **DMZ**

The DMZ feature allows one local user to be exposed to the Internet for special-purpose applications like Internet gaming or videoconferencing. When enabled, this feature opens all ports to a single station and hence renders that system exposed to intrusion from outside. The port forwarding feature is more secure because it only opens the ports required by that application.

**DMZ**

☐ Enable DMZ

DMZ Host IP Address : [＿＿＿＿＿＿]

[Refresh] [Save] [Apply]

| Item | Description |
|---|---|
| **Enable DMZ** | It will enable the DMZ service if you select it. |
| **DMZ Host IP Address** | Please enter the specific IP address for DMZ host. |

### 5.4.2 **Virtual Server**

The Virtual Server feature allows users to create Virtual Servers by re-directing a particular range of service port numbers (from the WAN port) to a particular LAN IP address.

## Virtual Server



| Item | Description |
|---|---|
| **Enable Virtual Server** | Select to enable virtual server or not. |
| **Address** | Specify the IP address which receives the incoming packets. |
| **Protocol** | Select the protocol type. |
| **Public Port Range** | Enter the port number, for example 80-80. |
| **Private Port Range** | Enter the port number, for example 20-22. |
| **Current Port Forwarding Table** | **It will display all port forwarding regulation you made.** |
| **Delete Selected & Delete All** | Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table. |

Please find the following figure to know that what the virtual server is. The web server is located on 192.168.1.100, forwarding port is 80, and type is TCP+UDP.

IP: 192.168.1.100   xDSL/Cable Modem   Internet   Remote User

### 5.5　VPN Server: PPTP/L2TP Setup

**Please refer VPN server**

### 5.6　Firewall

#### 5.6.1　DoS

**Please refer DoS**

#### 5.5.2　QoS

## QoS

☐ Enable QoS
☑ Automatic Uplink Speed
Manual Uplink Speed (Kbps) : 512

☑ Automatic Downlink Speed
Manual Downlink Speed (Kbps) : 512

### QoS Rule Advanced Settings :

Address Type:          ◉ IP    ○ MAC
Local IP Address:      [          ] - [          ]
MAC Address:           [          ]
Mode:                  Guaranteed minimum bandwidth ▾
Uplink Bandwidth
(Kbps):                [          ]
Downlink Bandwidth     [          ]    Apply Change
(Kbps):

### Current QoS Rules Table:

| Local IP Address | MAC Address | Mode | Uplink Bandwidth (Kbps) | Downlink Bandwidth (Kbps) | Select |
|---|---|---|---|---|---|

Delete Selected    Delete All    Delete Apply

| Item | Description |
|---|---|
| **Enable QoS** | Check "Enable QoS" to enable QoS function for the WAN port. You also can uncheck "Enable QoS" to disable QoS function for the WAN port. |
| **Automatic uplink speed** | Check the Automatic uplink speed. |
| **Manual Uplink speed** | Input **uplink** bandwidth manually |
| **Automatic downlink speed** | Check the Automatic downlink speed. |
| **Manual Downlink speed** | Input **downlink** bandwidth manually |
| **Address Type** | Set QoS by IP Address or MAC address |
| **Local IP Address** | Set local IP Address if the address type is by IP Address |
| **MAC Address** | Set MAC Address if the address type is by MAC Address |

| Mode | Select Guaranteed minimum bandwidth or Restricted maximum bandwidth |
|---|---|
| **Uplink Bandwidth** | Key in the bandwidth. |
| **Downlink Bandwidth** | Key in the bandwidth. |

### 5.5.3　Port Filtering

When enabled packets are denied access to Internet/filtered based on their port address.
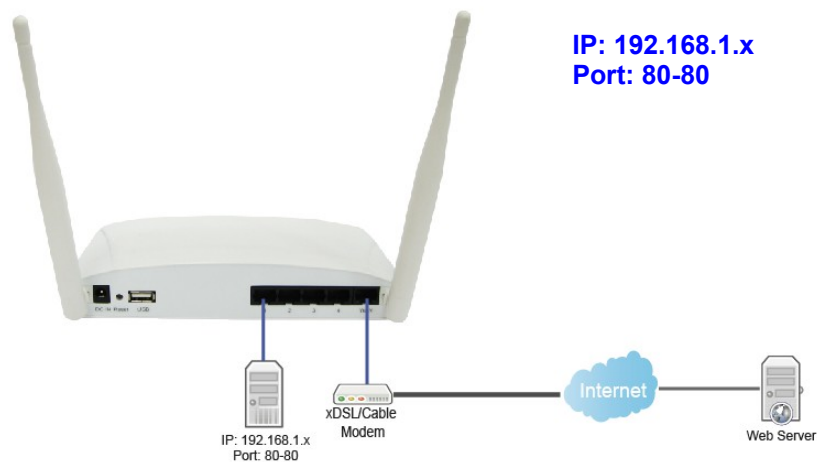
**Port Filtering**

☐ **Enable Port Filtering**

**Port Range :** [ ] - [ ]　**Protocol :** [Both ▾]　[Add]

**Current Filter Table:**

| Port Range | Protocol | Select |
|---|---|---|

[Delete Selected]　[Delete All]　[Apply]

| Item | Description |
|---|---|
| **Enable Port Filtering** | Select Enable Port Filtering to filter ports. |
| **Port Range** | Enter the port number that needs to be filtered. |
| **Protocol** | Please select the protocol type of the port. |
| **Add** | Click on **Add** to save the setting data. |
| **Current Filter Table** | It will display all ports that are filtering now. |
| **Delete Selected & Delete All** | Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table. |

Port 80 has been blocked as the following illustrate.

IP: 192.168.1.x
Port: 80-80

IP: 192.168.1.x
Port: 80-80

xDSL/Cable
Modem

Internet

Web Server

### 5.5.4 IP Filtering

When enabled, LAN clients are blocked / filtered from accessing the Internet based on their IP addresses



| Item | Description |
|---|---|
| **Enable IP Filtering** | Please select Enable IP Filtering to filter IP addresses. |
| **Local IP Address** | Please enter the IP address that needs to be filtered. |
| **Protocol** | Please select the protocol type of the IP address |
| **Apply** | Click on **Apply** to add the setting data |
| **Current Filter Table** | It will display all ports that are filtering now. |
| **Delete Selected & Delete All** | Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table. |

### 5.5.5 Mac Filter Schedule

**Please refer Mac Filter Schedule**

### 5.5.6 URL Filtering

**Please refer URL Filtering**

### 5.5.7 IP Binding

**Please refer IP Binding**

### 5.5.8 VLAN

### 5.5.9 VLAN

**VLAN Settings**



| Item | Description |
|------|-------------|
| **Tag** | Add VLAN tag to packet |
| **VID** | Set VLAN ID（1~4096） |

| Priority | It indicates the frame priority level. Values are from 0 (best effort) to 7 (highest); 1 represents the lowest priority |
|----------|---------------------------------------------------------------------------------------------------------------------|
| **CIF** | Enable or Disable CIF |

## 5.6 System

This section including **Wake on LAN, Change Username/Password, Upgrade Firmware, Profiles Save, Remote Management, Time Zone, UPnP, Route Setup, VPN Passthrough, and Wan Type Auto Detection**. It is easy and helpful for users making more detailed settings.

### 5.6.2 Wake on Lan

Switch your computer ON through your LAN or the Internet . To support WOL you must have a computer with Motherboard that supports WOL, as well as a Network Controller (NIC) supporting this function.  Most of the newer Motherboard (circa 2002 and On), have an On Board NIC that supports WOL.  Otherwise you need to install a PCI NIC that is WOL capable.

**Wake on Lan Schedule**   Help

☐ Enable Wake on LAN Schedule

| Enable | Day | Time | MAC Address | Active Now |
|--------|-----|------|-------------|------------|
| ☐ | Sun ▼ | 00 ▼ : 00 ▼ | 000000000000 / James-PC ▼ ∧ | ↻ |
| ☐ | Sun ▼ | 00 ▼ : 00 ▼ | 000000000000 / James-PC ▼ ∧ | ↻ |
| ☐ | Sun ▼ | 00 ▼ : 00 ▼ | 000000000000 / James-PC ▼ ∧ | ↻ |

### 5.6.3 Change Password

Users can set or change user name and password used for accessing the web management interface in this section.

Input User Name and New Password, then input Confirm Password again.

### 5.6.4 Firmware Upgrade

**Please refer Firmware Upgrade**

### 5.6.5 Profiles Save

Users can create a backup file that contains current router settings. This backup file can be used to restore router settings. This is especially useful in the event you need to reset the router to its default settings.

1. Save Configuration

**(1).** Click Save



**(2).** Please click "Save" to save the configuration to your computer.

**(3).** Select the location which you want to save file, then click Save.
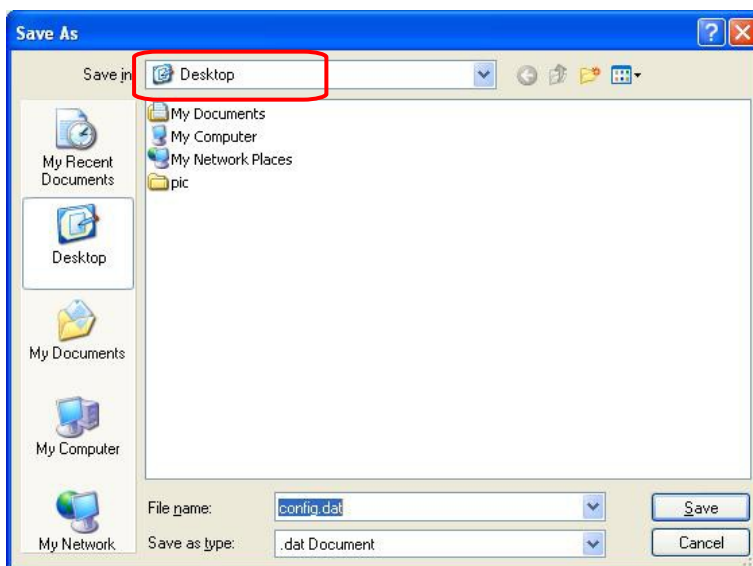


2. Load configuration file

**(1).** Tap "browse" and select configuration file then click Open
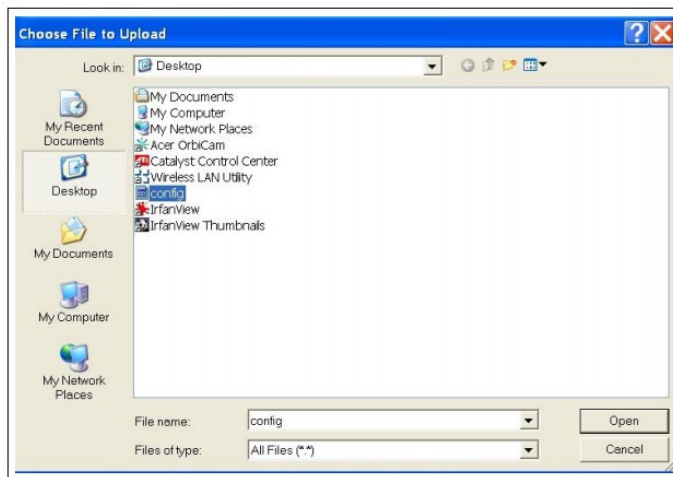
**(2).** Click Upload to upload configuration file to BRC70X .
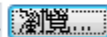


**(3).** After 60 seconds, BRC70X will reboot automatically.

### 5.6.6    Remote Management

**Please refer <u>Remote Management</u>**

### 5.6.7    Time Zone

Users can synchronize the local clock on the router to an available NTP server (optional). To complete this setting, enable NTP client update and select the correct Time Zone.

## Time Zone Setting

Time Zone Select :

(GMT+08:00)Taipei ▼

☑ Enable NTP client update

☐ Automatically Adjust Daylight Saving

NTP server : ◉ 220.130.158.71 - Taiwan ▼

○ [_____] (Manual IP Setting)

[Refresh] [Save] [Apply]

| Item | Description |
|------|-------------|
| **Time Zone Select** | Please select the time zone. |
| **Enable NTP client update** | Please select to enable NTP client update or not. |
| **Automatically Adjust Daylight Saving** | Please select to enable Automatically Adjust Daylight Saving or not. |
| **NTP Server** | Please select the NTP server from the pull-down list, or you can enter the NTP server IP address manually. |
| **Save & Apply** | Click on Save to save the setting date, the Apply button for execute current configuration. |

### 5.6.8 UpnP

## UPnP Setting

Enable/Disable UPNP:  ◉ Enabled  ○ Disabled

[Refresh] [Save] [Apply]

● **UPNP**

Universal Plug and Play (UPnP) is a standard of networking protocols promulgated by the UPnP Forum. The goals of UPnP are to allow devices to connect seamlessly and to simplify the implementation of networks in the home (data sharing, communications, and entertainment) and in corporate

environments for simplified installation of computer components. BRC70X supports UPnP function, and can cooperate with other UPnP devices. When you activate UPnP, please click My Network Places. Users will see an Internet Gateway Device icon. By click the icon, users can enter the GUI of the router. If you do not wish to use UPnP, you can disable it.

### 5.6.9 Route Setup

Dynamic routing is a distance-vector routing protocol, which employs the hop count as a routing metric. RIP prevents routing loops by implementing a limit on the number of hops allowed in a path from the source to a destination. The maximum number of hops allowed for RIP is 15

Static routing is a data communication concept describing one way of configuring path selection of routers in computer networks. It is the type of routing characterized by the absence of communication between routers regarding the current topology of the network.This is achieved by manually adding routes to the router routing table.

## Routing Setup

| | | | | | |

**Enable Dynamic Route**

NAT: ● Enabled ○ Disabled
Transmit: ● Disabled ○ RIP 1 ○ RIP 2
Receive: ● Disabled ○ RIP 1 ○ RIP 2

**Enable Static Route**

IP Address: [                    ]
Subnet Mask: [                    ]
Gateway: [                    ]
Metric: [      ]
Interface: [LAN ▼] Add

**Static Route Table:**

| Destination IP Address | Netmask | Gateway | Metric | Interface | Select |
|---|---|---|---|---|---|

Delete Selected    Delete All    Apply

| Item | Description |
|---|---|
| **Enable Dynamic Route** | Enable or Disable dynamic route |
| **NAT** | Enable or Disable NAT function |
| **Transmit** | There are 3 options： <br><br> 1. Disable：do not send any RIP packet out <br> 2. Send RIP1 packet out <br> 3. Send RIP2 packet out |
| **Receive** | There are 3 options： <br><br> 4. Disable：do not receive any RIP packet <br> 5. Only receive RIP1 packet <br> 6. Only receive RIP2 packet |

| Item | Description |
|---|---|
| **Enable Static Route** | Enable or Disable dynamic route |
| **IP Address** | Destination IP address |
| **Subnet Mask** | Destination IP subnet mask |
| **Gateway** | Gateway IP address for destination |
| **Metric** | Metric number on router's routing table |
| **Interface** | Static route rule for LAN or WAN interface |

### 5.6.10 VPN Passthough

Virtual Private Networking (VPN) is typically used for work-related networking. For VPN tunnels, the router supports IPSec, Pass-through, PPTP Pass-through, and L2TP Pass-through.

## VPN Passthrough Setting
Help

Enable/Disable IPSec Passthrough: ⊙ Enabled ○ Disabled
Enable/Disable PPTP Passthrough: ⊙ Enabled ○ Disabled
Enable/Disable L2TP Passthrough: ⊙ Enabled ○ Disabled
Enable/Disable IPV6 Passthrough: ⊙ Enabled ○ Disabled

Refresh    Save    Apply

| Item | Description |
| --- | --- |
| **IPSec Pass-through** | Internet Protocol Security (IPSec) is a suite of protocols used to implement secure exchange of packets at the IP layer. To allow IPSec tunnels to pass through the router, IPSec Pass-through  is enabled by default. To disable IPSec Pass-through , select Disable |
| **PPTP Pass-through** | Point-to-Point Tunneling Protocol is the method used to enable VPN sessions to a Windows NT 4.0 or 2000 server. To allow PPTP tunnels to pass through the router, PPTP Pass-through is enabled by default. To disable PPTP Pass-through, select Disable. |
| **L2TP Pass-through** | To allow the L2TP network traffic to be forwarded to its destination without the network address translation tasks. |
| **IPV6 Pass-through** | Allow IPV6 packet to be forwarded to its destination without the network address translation tasks. |

### 5.6.11  Wan Type Auto Detection

**Auto Detection**

☐  **Enable WAN Type Auto Detection**

Apply

# 6  Q & A

## 6.5  Installation

1.  **Q: Where is the XDSL Router installed on the network?**

    A:  In a typical environment, the Router is installed between the XDSL line and the LAN. Plug the XDSL Router into the XDSL line on the wall and Ethernet port on the Hub (switch or computer).

2.  **Q: Why does the throughput seem slow?**

    A:  To achieve maximum throughput, verify that your cable doesn't exceed 100 meter. If you have to do so, we advise you to purchase a bridge to place it in the middle of the route in order to keep the quality of transmitting signal. Out of this condition you would better test something else.

    ● Verify network traffic does not exceed 37% of bandwidth.
    ● Check to see that the network does not exceed 10 broadcast messages per second.
    ● Verify network topology and configuration.

## 6.6  LED

1.  **Why doesn't BRC70X power up?**

    A:  Check if the output voltage is suitable, or check if the power supply is out of order.

2.  **The Internet browser still cannot find or connect to BRC70X after verifying the IP address and LAN cable, the changes cannot be made, or password is lost.**

    A:  In case BRC70X is inaccessible; you can try to restore its factory default settings. Please press the "Reset" button and keep it pressed for over 7 seconds and the light of STATUS will vanish. The LEDs will flash again when reset is successful.

3.  **Why does BRC70X shut down unexpectedly?**

    A:  Re-plug your power adapter. Then, check the STATUS indicator; if it is off, the internal flash memory is damaged. For more help, please contact with your provider.

## 6.7  IP Address

1.  **Q: What is the default IP address of the router for LAN port?**

    A:  The default IP address is 192.168.1.1 with subnet mask 255.255.255.0

2.  **Q: I don't know my WAN IP.**

    A:  There are two ways to know.

    Way 1:  Check with your Internet Service Provider.

    Way 2:  Check the setting screen of BRC70X. Click on **Status & Log** item to select **Network Configuration** on the Main Menu. WAN IP is shown on the WAN interface.

3.  **How can I check whether I have static WAN IP Address?**

    A: Consult your ISP to confirm the information, or check Network Configuration in BRC70X 's Main Menu.

4.  **Will the Router allow me to use my own public IPs and Domain, or do I have to use the IPs provided by the Router?**

    A:  Yes, the Router mode allows for customization of your public IPs and Domain.


## 6.8  OS Setting

1.  **Why can't my computer work online after connecting to BRC70X?**

    A: It's possible that your Internet protocol (TCP/IP) was set to use the following IP address. Please do as the following steps. (Windows 2000 & XP) **Start**＞**Settings**＞ **Network and Dial-up Connections**＞double click on **Internet Protocol(TCP/IP)**＞ select **obtain IP address automatically**＞ Click on **OK** button. Then, open Internet browser for testing. If you still can't go online, please test something else below.

    ● Verify network configuration by ensuring that there are no duplicate IP addresses.
    ● Power down the device in question and ping the assigned IP address of the device. Ensure no other device responds to that address.
    ● Check that the cables and connectors or use another LAN cable.

**2. Q: Why can't I connect to the router's configuration utility?**

A: Possible Solution 1: Make sure that your Ethernet connect properly and securely. Make sure that you've plugged in the power cord.

Possible Solution 2: Make sure that your PC is using an IP address within the range of 192.168.1.2 to 192.168.1.254. Make sure that the address of the subnet mask is 255.255.255.0. If necessary, the Default Gateway data should be at 192.168.1.1. To verify these settings, perform the following steps:

**Windows 2000, or XP Users:**

1. Click on Windows **Start** > click on **Run** > input **cmd** > click on **OK** button.
2. At the DOS prompt, type ipconfig/all.
3. Check the IP Address, Subnet Mask, Default Gateway data. Is this data correct? If the data isn't correct. Please input **ipconfig/release** > press **Enter** > input **ipconfig/renew** > press **Enter**.

Possible Solution 3: Verify the connection setting of your Web browser and verify that the HTTP Proxy feature of your Web browser is disabled. Make these verifications so that your Web browser can read configuration pages inside your router. Launch your Web browser.

**Internet Explorer Users:**

1. Click on **Tools** > **Internet Options** > **Connections tab**.
2. Select **never dial a connection**, click on **Apply** button, and then click on **OK** button.
3. Click on **Tools** and then click on **Internet Options**.
4. Click on **Connections** and then click on **LAN Settings**.
5. Make sure none of the check boxes are selected and click on **OK** button.
6. Click on OK button.

**Netscape Navigator Users:**

1. Click on **Edit** > **Preferences** > double-click **Advanced** in the Category window.
2. Click on **Proxies** > select **Direct connection to the Internet** > click on **OK** button.
3. Click on **Edit again** and then click on **Preferences**.
4. Under category, double-click on **Advanced** and then click on **Proxies**.

5. Select **Direct connection to the Internet** and click on **OK** button.

6. Click on **OK** button.

3. **Q: Web page hangs, corrupt downloads, or nothing but junk characters is being displayed on the screen. What do I need to do?**

A: Force your NIC to 10Mbps or half duplex mode, and turn off the "Auto-negotiate" feature of your NIC as a temporary measure. (Please look at the Network Control Panel, in your Ethernet Adapter's Advanced Properties tab.)

4. **Q: Why can't I connect to the Web Configuration?**

A: you can remove the proxy server settings in your web browser.

### 6.9 BRC70X Setup

1. **Q: Why does BRC70X's setup page shut down unexpectedly?**

A: If one of the pages appears incompletely in BRC70X 's setup pages, please click on Logout item on the Main Menu before shutting it down. Don't keep it working. Then, close Internet browser and open it again for going back to the previous page.

2. **Q:   I don't know how to configure DHCP.**

A: DHCP is commonly used in the large local network. It allows you to manage and distribute IP addresses from 2 to 254 throughout your local network via BRC70X. Without DHCP, you would have to configure each computer separately. It's very troublesome. Please Open **Internet browser** > Input **192.168.1.1 in the website blank field** > Select **DHCP Server under** the **IP Config Menu**. For more information, please refer to 3.3.2 (Router Mode) or 4.3.1 (AP Mode).

3. **Q: How do I upgrade the firmware of BRC70X ?**

A: Periodically, a new Flash Code is available for BRC70X on your product supplier's website. Ideally, you should update BRC70X's Flash Code using **Firmware Upgrade** on the **System Management** menu of BRC70X Settings.

4. **Q: Why is that I can ping to outside hosts, but cannot access Internet websites?**

A: Check the DNS server settings on your PC. You should get the DNS servers settings from your ISP. If your PC is running a DHCP client, remove any DNS IP

address setting. As the router assign the DNS settings to the DHCP-client-enabled PC.

5. **Q: BRC70X couldn't save the setting after click on Apply button?**

   A: BRC70X will start to run after the setting finished applying, but the setting isn't written into memory.  Here we suggest if you want to make sure the setting would be written into memory, please reboot the device via **Reboot** under **System Management** directory**.**

## 6.10 Support

1. **Q: What is the maximum number of IP addresses that the XDSL Router will support?**

   A:  The Router will support to 253 IP addresses with NAT mode.

5. **Q: Is the Router cross-platform compatible?**
   A:  Any platform that supports Ethernet and TCP/IP is compatible with the Router.

## 6.11 Others

1. **Q: Why does the router dial out for PPPoE mode very often?**

   A: Normally some of game, music or anti-virus program will send out packets that trigger the router to dial out, you can close these programs. Or you can set the idle time to 0, then control to dial out manually.

2. **Q: What can I do if there is already a DHCP server in LAN?**

   A: If there are two DHCP servers existing on the same network, it may cause conflict and generate trouble. In this situation, we suggest to disable DHCP server in router and configure your PC manually.

# 7 Appendices

## 7.5 Operating Systems

1. Microsoft：Windows 2000, XP, Vista, Windows 7.

2. Apple：Mac OS X 10.4.7, Leopard and the following related versions.

3. Linux：Redhat 9, Fedora 6 & 7, Ubuntu 7.04 and the following related versions.

## 7.6 Browsers

1. Internet Explorer ver. 6 and 7 and the following related versions.

2. FireFox ver. 2.0.0.11 and the following related versions.3.

3. Safari ver. 3.04 and the following related versions.

## 7.7 Communications Regulation Information

Should any consumers need to learn more information, services and supports, please contact the supplier of your product directly.